

REMARKS

An interview with the undersigned attorney is requested prior to action on this amendment. It is requested that the Examiner contact the undersigned attorney by telephone to arrange such an interview.

The application has been amended and is believed to be in condition for allowance.

The claims have been amended as to form to comply with U.S. practice requirements and preferences. Claim 1 has been amended as to form to make more explicit that the first pump comprises two outlets, a first of the two outlets providing water flow to an inlet of the second impeller and that the second outlet of the first impeller as well as the outlet of the second impeller are separate outlets to the pump exterior.

Claims 3 and 11 have been amended in view of this subject matter contained therein now being more explicitly recited in claim 1.

As the present amendment reduces the issues under consideration, entry of the amendment is solicited.

Claims 1-2 were rejected as anticipated by KOBAYASHI 5,888,053.

Claims 3-6 and 11 were rejected as obvious over KOBAYASHI in view of IDLAND 5,392,473.

Claims 7 and 8 were rejected as obvious in further view of GAETH 5,049,770.

KOBAYASHI describes a pump comprising two impellers, a first impeller operating at a low pressure and high flow rate and a second impeller operating at a higher pressure and a lower flow rate. However, KOBAYASHI does not teach, nor suggest, that the first impeller has two outlets. KOBAYASHI does not teach that a first of two such outlets supplies fluid at a low pressure and high flow rate to the inlet of the second impeller whereas the second outlet provides a separate outlet to the pump exterior such that the pump has two separate outlets to the pump exterior. Rather, KOBAYASHI teaches that the first impeller has only one outlet connected to the inlet of the second impeller in order to increase the pressure of the water at the outlet of the second pump. KOBAYASHI teaches only a single outlet to the exterior of the pump.

Accordingly, claim 1 is clearly novel over the applied art.

Neither of the secondary references teaches a first impeller having two outlets where one of the outlets directs flow from a low pressure region towards a region of higher pressure.

The Official Action indicated with respect to claim 3, that IDLAN disclosed an impeller having two outlets, one outlet being external to the pump and the other outlet being connected to the inlet of the second impeller. However, note that the junction between the outlet of the impeller and the inlet of the impeller is such that water flows from the region of high

pressure to the region of lower pressure. See specifically column 4, lines 46-47.

Accordingly, if the teaching of IDLAN were applied to the pump of KOBAYASHI, it would lead to a system in which the outlet of the second impeller 8D is connected to the inlet of the first impeller 8B so that water flows from the region of high pressure to the region of low pressure. The teaching of IDLAN would not lead to a system in which the outlet of the first impeller 8B is connected to the inlet of the second impeller 8D so that water flows from a region of low pressure to a region of higher pressure as required by the claim.

Further, note that the Official Action seems to misunderstand the function of duct 40 which is not used to cool the motor (see page 4 of the Official Action) but to heat the water at the inlet 33A (see column 4, lines 27-29).

In view of this, claim 2 also appears to be non-obvious. Additionally, the features of the dependent claims are seen as non-obvious over any reasonable fair combination of KOBAYASHI and IDLAN.

Further, the dependent claims are believed to be allowable at least for depending from an allowable claim.

Accordingly, reconsideration and allowance of all the claims are respectfully requested.

The present amendment is believed to be fully responsive. Allowance of the case is solicited.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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